DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-009240
Date Inspected: 28-Sep-2009

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 645
OSM Departure Time: 1845
Location: Shanghai, China

CWI Name:	Li Jha and Xu Yumin	**CWI Present:**	☑ Yes ☐ No
Inspected CWI report:	☐ Yes ☑ No ☐ N/A	**Rod Oven in Use:**	☑ Yes ☐ No ☐ N/A
Electrode to specification:	☑ Yes ☐ No ☐ N/A	**Weld Procedures Followed:**	☑ Yes ☐ No ☐ N/A
Qualified Welders:	☑ Yes ☐ No ☐ N/A	**Verified Joint Fit-up:**	☐ Yes ☑ No ☐ N/A
Approved Drawings:	☑ Yes ☐ No ☐ N/A	**Approved WPS:**	☑ Yes ☐ No ☐ N/A
		Delayed / Cancelled:	☐ Yes ☑ No ☐ N/A

Bridge No: 34-0006
Component: OBG Trail Assembly

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) S. Manjunath. Math was present during the times noted above for observations relative to the work being performed.

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 5AW

This Quality Assurance (QA) Inspector witnessed final tension verification for Upper and Lower Chevron Brace at North (Counter Weight) side and South (Cross Beam) side at PP 29, PP 30 and PP 31 for Segment 5AW. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used are M22x70 RC Lot No. DHGM220020 and final Torque required was 520 N-m and

Bolt sizes used are M22x75 RC Lot No. DHGM220005 and final Torque required was 473 N-m.

Manual Torque wrench was been used with Serial No. XQ2-599 and Hydraulic Wrench was been used for inaccessible areas with Model No. MP532-2 and with Serial No. PW090331002.

Segment 5BW

This Quality Assurance (QA) Inspector witnessed final tension verification for Upper and Lower Chevron Brace at

North (Counter Weight) side and South (Cross Beam) side at PP 32 and PP 34 for Segment 5BW, at PP 33, only South side Upper and Lower Chevron was not offered by ZPMC and ABF. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used are M22x70 RC Lot No. DHGM220020 and final Torque required was 520 N-m and

Bolt sizes used are M22x75 RC Lot No. DHGM220005 and final Torque required was 473 N-m.

Manual Torque wrench was been used with Serial No. XQ2-599 and Hydraulic Wrench was been used for inaccessible areas with Model No. MP532-2 and with Serial No. PW090331002.

Segment 5CE

This Quality Assurance (QA) Inspector witnessed final tension verification for Upper and Lower Chevron Brace at South (Bike Path) side for PP 35. At PP 36 North (Counter Weigh) side Upper Chevron witnessed for tension verification and Lower Chevron was not been offered by ZPMC and ABF for Segment 5CE. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used are M22x70 RC Lot No. DHGM220004 and final Torque required was 453 N-m,

Bolt sizes used are M22x75 RC Lot No. DHGM220005 and final Torque required was 473 N-m and

Bolt sizes used are M22x80 RC Lot No. DHGM220050 and final Torque required was 486 N-m.

Manual Torque wrench was been used with Serial No. X02-584 and Hydraulic Wrench was been used for inaccessible areas with Model No. MP 532-2 and with Serial No. PW090331002.

1AW to 1AAW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Deck Panel Transverse Weld. The weld joint is identified as OBW1-001. The welding was performed against Critical Welding Repair Report B-CWR774. The welder is identified as 068764. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-1G(1F)-Repair.

Segment 5BE to 5CE

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Transverse Splice weld the back gouged areas. The weld joint is identified as OBE5-006 and 007. The welder is identified as 220067. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2214-B-U2-FCM-1.

1AE to 1AAE

WELDING INSPECTION REPORT

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This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Deck Panel Transverse Weld. The weld joint is identified as OBE1-001. The welding was performed against Welding Repair Report B-WR7875. The welders were identified as 045138 and 045133. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-1G(1F)-Repair.

Segment 2AW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Mis-drilled hole repair to cable tray bolt hole in T-Stiffener at PP 14 and 15. Welding was performed against Critical Welding Report B-CWR-755 Rev.1. The welder is identified as 220069. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-FCAW-1G(1F)-Repair-Misdrilled hole.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer